

REMARKS

Claims 12-15, 17-19 and 22 are of record pending in this application.

Claim Rejections

Claims 12-15, 17-19 and 22 stand rejected under 35 U.S.C. §103(a) as being nonobvious over Goodrich et al. (USPN 6,258,577) in view of Joshi PC.

Applicants respectfully disagree with this rejection, as the Examiner has not made a prima facie case of nonobviousness.

As set forth in MPEP 2143, “The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art.” *KSR International Co. v. Teleflex Inc.*

As discussed above, all of the elements of Applicants claims were not known from either the Goodrich or Joshi references.

There is no disclosure in Goodrich of using riboflavin and light (at any wavelength) to inactivate white blood cells. There is also no disclosure of using riboflavin and light to cause damage to the nucleic acids of white blood cells and substantially maintaining the damage to the nucleic acids of white blood cells. Thirdly, and as the Examiner admits, Goodrich does not disclose the specific use of UVB light to inactivate white blood cells.

The Joshi reference does not cure the deficiencies of the Goodrich reference.

The Joshi reference teaches that riboflavin generates singlet oxygen and superoxide anion radicals upon exposure to UVB light. Joshi also teaches that “photo oxidation of dioxyguanosine by riboflavin and UV radiation is of significant importance from the point of view of cell-damaging reactions by activated oxygen species produced by the synergistic action of sunlight

and chemical agents. It is now known that activated oxygen species are responsible for skin photosensitization, tumor promotion and carcinogenic properties.”

Combining the teachings of Goodrich with the teachings of Joshi, one skilled in the art would think that irradiating blood products with riboflavin and UVB light would produce activated oxygen species which would cause damage to the red blood cells, platelets and plasma, and cause tumor promotion and cancer in the irradiated cells. Furthermore, as neither Goodrich nor Joshi teach the irradiation of white blood cells with UVB light, one skilled in the art would not think to do this using the combined teachings of Goodrich and Joshi.

Applicants respectfully request the Examiner to withdraw his objections and to pass this application to issue. If there are any questions, or if prosecution can be expedited in any manner by a telephone conference, the Examiner is urged to call Applicants’ representative at the below telephone number.

It is believed no fee is required for this filing. If this belief is incorrect, the Commissioner is authorized to charge the fee to Deposit Account 032316.

Respectfully submitted,

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Date

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